

REMARKS

The specification has been objected to as not being written "in such full, clear, concise and exact terms as to enable any person skilled in the art to" practice the invention in its best mode. The objection to the specification is raised in paragraph 4 of the Examiner's Office Action letter.

Claims 22, 2-4, 7-8, and 12-19 have been rejected by the Examiner under 35 USC §112, first paragraph, because the specification, while being enabling for mixing silver nitrate and sodium acetate in the presence of concentrated solution of silver ion or acetate ion, does not reasonably provide enablement for other conditions. This rejection is set forth in paragraph 6 of the Examiner's Office Action.

Claims 22, 2-4, 7-8, and 12-19 have been rejected by the Examiner under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention for the reasons set forth in paragraph 8 of the Examiner's Office Action letter. These objections and rejections are respectfully traversed.

As stated in the specification, pages 2 to 3, the object of the invention is to analyze a very small amount of sulfur contained in an oil sample by X-ray fluorescence. Although commercial reagents are used for this analysis, sulfur which might be contained in the reagents as impurities cannot be neglected for analyzing the trace amount of sulfur in the oil sample. If the analysis is carried out without removing such impurities, an accurate analysis result cannot be

obtained. Therefore, such impurities have to be removed from the sulfur-capturing liquid in advance before the liquid is used for the analysis.

If a person skilled in the art reads the present specification on the basis of the object of the present invention, it is believed that the present invention can be clearly and fully understood.

The Examiner pointed out in his Office Action on page 3, lines 1 to 3 that silver acetate is precipitated from the mixture of silver nitrate and sodium acetate only under certain conditions. Such conditions are not disclosed in the present specification. However, there is no intention in the present invention to positively and actively make precipitates of silver acetate from the mixed solution. In certain circumstances, some amounts of precipitates are formed even under unfavorable conditions. In the event that such precipitates are created in the mixed solution, it is necessary to remove them from the solution in order to use the solution in the analysis. If such solid components exist in the sulfur-capturing liquid, a precise analysis result cannot be obtained.

The Examiner also pointed out in his Office Action, page 3, lines 3 to 6 that if silver acetate is removed from the solution, then what remains in the solution? Please note that in the specification, on page 14, 2.1 g of silver nitrate and 0.4 g of sodium acetate are mixed as an example. The molecular weight of silver nitrate is 170 and the molecular weight of sodium acetate is 82. One mol of silver nitrate is reacted with one mol of sodium acetate to form silver acetate. Even if the reaction is carried out completely and quantitatively, less than half amounts of silver nitrate contained in the solution are changed into silver acetate, (it is clear that silver

nitrate exists in the solution), although it is not the case as mentioned above. Only precipitates generated causelessly are removed from the solution. So, both compounds of silver nitrate and sodium acetate are contained in the solution.

The Examiner has pointed out in his Office Action, page 4, line 5 that no sulfur is supposed to be contained in such solutions. Please note that pure solutions which do not contain sulfur components cannot be completely obtained. As explained above, it is necessary to remove sulfur which might be contained as impurities in the sulfur capturing liquid.

In response to the Examiner's rejections, the claims have been further amended. In claim 22, "precipitating" has been eliminated, because precipitates are not intentionally made, as mentioned above, "missed solution" is amended to "mixed solution" as suggested by the Examiner at paragraph 8 on page 4.

Further, "silver sulfide and silver" has been changed to "silver sulfide and/or silver" to cover the situation where both components of silver sulfide and silver are created at a given time.

In claim 2, the Examiner is right with respect to his comments on page 4, eight lines from the bottom of the Office Action. The limitation relating to the oil sample should not be present in the claims and has therefore been deleted.

In reply to the Examiner's question regarding the "catalyst", the limitation of "for the catalyst" has been deleted.

Further, the expression "serving as the starting material thereof", has been deleted from the claim because it is superfluous.

Concerning claim 3 and in reply to the Examiner's question regarding the phrase "to precipitate silver sulfide containing silver compounds," this phrase has been amended to read "silver compounds". According to the disclosure in the specification, at page 15, the silver compounds may include silver sulfide and silver chloride, etc.

Concerning claims 7-8, 12-15 and 17-18, the Examiner is correct, and thus the expression, "sulfur-containing liquid" has been changed to "sulfur-capturing liquid".

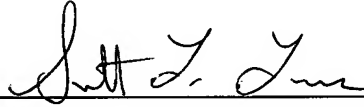
Concerning claim 14, the limitations "having silver nitrate dissolved in a solvent" and "having sodium acetate dissolved in said solvent" are deleted because the Examiner, on page 5 of the Office Action has suggested that it is not necessary to repeat this expression.

Accordingly, in view of the above amendments and remarks reconsideration of the objections and rejections and allowance of the claims in the present application are respectfully requested. In the event that the present amendment does not place the application in condition for allowance, entry thereof is respectfully requested to place the application in better condition for appeal.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By  #4,458
Joseph A. Kolasch, #22,463

JAK/pay

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000